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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/379,215	08/23/99	BECKMANN	F 2427/207-104

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EXAMINER

PRATT, C

ART UNIT

PAPER NUMBER

1771

DATE MAILED:

03/02/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/379,215

Applicant(s)

BECKMANN, FRIEDHELM

Examiner

Christopher C. Pratt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 199.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1/13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 17) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: _____.

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DETAILED ACTION

Claim Objections

1. Claim 1 objected to because of the following informalities: It appears to be missing the word "to" between adjacent and said. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5 and 9 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites a process of melt extruding carbon fibers. A process of melting can not form carbon fibers. This rejection can be overcome by removing the "formed of" process limitation, which is given no patentable weight anyway. This claim also recites the limitation "fibers...formed of melted synthetic materials from the group consisting of... a combination of different melted fibers." The word "consisting" designates a closed markush group, while "a combination of different melted fibers" opens said markush group up to any possible fiber.

The meaning of claim 9 is not clear and can not be determined by the Examiner. What does the phrase "variable volume" mean? What is a "molded-in functional element?" How do these two phrases correspond to each other?

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4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 9 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 9 is confusing and unclear as set forth above in 112 second paragraph rejections. Furthermore, there is no basis or explanation of the meaning of this claim found within the specification.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

7. Claims 1-4 and 7-13 rejected under 35 U.S.C. 102(e) as being anticipated by Gardill (5614285).

Gardill's patent is concerned with the creation of a molded panel composite made from a blend of natural and plastic fibers. Gardill discloses the use of a multilayer composite body comprising thermoplastic layers having synthetic materials (35 and 40 of fig. 2). Gardill also discloses the use of a

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natural fiber layer bonded with thermoplastic synthetic material (44 of fig. 2).

Gardill also discloses the use of multiple layers of natural fibers bonded with thermoplastic synthetic material (col. 4, lines 7-11). Gardill further discloses the structure of said layers comprising at least one reinforcing insert (42 of fig. 2) adjacent to said thermoplastic layers (40 and 35 of fig. 2) and said natural fiber layers (44 of fig. 2). Gardill also discloses said reinforcing insert having an open-pored fabric formed from fibers (col. 4, lines 9-13). Gardill also discloses said open-pored fabric penetrated from at least one side by melted synthetic materials of at least one of said adjacent layers. This is an inherent result of the heating process of the furnace 20, illustrated in fig. 1 (col. 2, lines 10-17).

Gardill also discloses the melting temperature of said synthetic materials to be approximately 200 degrees (col. 2, line 15).

Gardill also discloses said synthetic material to be polypropylene (col. 2, line 15).

Gardill also discloses a natural fiber of flax (col. 2, line 40).

With respect to claim 7, Gardill discloses several layers of reinforcing and natural layers stacked upon each other (col. 4, lines 6-11). This embodiment would comprise a reinforcing layer disposed between adjacent natural layers. Said natural layers would be adjacent to a second and third reinforcement layer, which when further stacked would be adjacent to two layers comprising thermoplastic.

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Gardill discloses the use of a fiber material comprising said thermoplastic layer (col. 2, line 6).

With respect to claim 9, a reasonable search of the prior art could not be conducted, as set forth in the above 112 rejections. However, Gardill discloses said composite material having a varying thickness, as well as a change in density resulting from the structure of Gardill's mold. Based on this disclosure Gardill anticipates applicants claim 9, as it is understood by the Examiner.

With respect to claim 10, Examiner takes official notice that polypropylene fibers inherently have a white color.

Gardill discloses having covering layers bonded to outer surfaces of thermoplastic layers (73 of fig. 5).

Gardill discloses said reinforcing insert having a higher melting temperature than said thermoplastic (col. 2, lines 10-18).

Gardill discloses said preform for use in a motor vehicle (col. 1, lines 10-15).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 5-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Gardill (5614285) in view of Textile Science.

Gardill discloses all elements of applicant's claim 1 to which claims 5-6 refer, as set forth above in 102 rejection. With respect to claim 5, Gardill fails to disclose the use of glass fibers in said reinforcing layer.

With respect to claim 6, Gardill discloses one thermoplastic layer bonded to the outer surface of said natural fiber layer (35, figure 2). However, Gardill fails to teach a second thermoplastic layer disposed on the outside surface of a second natural fiber layer.

Textile Science teaches the use of glass fibers in textile applications including reinforcements for plastic forms (p. 162). It would have been obvious to a person of ordinary skill in the art to combine the preform of Gardill with glass fibers in said reinforcing layer based on the reasonable expectation of providing said preform with the ability to withstand extreme stress and have an excellent resistance to aging, as taught by Textile Science (p161-162).

Textile Science also teaches that plastic coating can be applied to either the face or the back of a fabric (p. 313). Textile Science also teaches the benefits of a coating of plastic disposed on two sides of a composite material (p. 313). It would of been obvious to a person of ordinary skill in the art to combine the composite preform of Gardill with another thermoplastic layer disposed on the other side of a second natural fiber layer. Such a modification would have been

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motivated by the reasoned expectation of providing Gardill's preform with increased insulation, and increased resistance to soil and water.

Conclusion


10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Della Vecchia (.4269884) and Romesberg (5942321) both seem to disclose elements of applicant's invention.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Pratt whose telephone number is 703-305-6559. The examiner can normally be reached on Monday - Friday from 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-308-2351 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2351.

Christopher C. Pratt
February 27, 2000


TERREL MORRIS
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